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This application is a continuation of U.S. Patent Application Serial No. 08/470,142, filed June 6, 1995. The aforementioned application Serial No. 08/470,142 is a continuation-in-part of U.S. Patent Application Serial No. 08/254,368, filed June 6, 1994 (now U.S. Patent No. 5,573,517). The aforementioned application Serial No. 08/254,368, filed June 6, 1994 is a divisional of U.S. Patent Application Serial No. 08/013,942, filed February 4, 1993 (now U.S. Patent No. 5,320,611). The benefit of the earlier filing dates of the aforementioned U.S. patent application Serial Nos. 08/470,142; 08/254,368; and 08/013,942 is hereby claimed for all subject matter common to this application and the aforementioned applications.

A marked up copy showing changes made and a clean copy of the changes are enclosed herewith.

In the Claims:

Please cancel claims 2-56 without prejudice.

Please add the following claims:

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57. An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath leaving a passage which extends between axially opposite end portions of said sheath, said sheath being resiliently expandable from a contracted condition in which the passage through said sheath has a relatively small cross sectional size in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which the passage through said sheath has a relatively large cross sectional size in a plane

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59. An expandable cannula as set forth in claim 57 wherein said sheath has an oval cross section in a plane extending perpendicular to the longitudinal central axis of said sheath when said sheath is in the expanded condition.

61. An expandable cannula as set forth in claim 57 wherein said passage in said sheath is engageable by a member having an oval cross sectional configuration in a plane extending perpendicular to the longitudinal central axis of said sheath, said member having an oval cross sectional configuration being axially movable along said passage in said sheath to expand said sheath from the contracted condition to the expanded condition.

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said passage in said sheath to expand said sheath from the contracted condition to the expanded condition.

63. An expandable cannula as set forth in claim 57 further including an array of wires which is enclosed by said sheath, said array of wires being expandable with said sheath during expansion of said sheath from the contracted condition to the expanded condition.

64. An expandable cannula as set forth in claim 57 further including a variable volume chamber connected with said sheath and movable into the patient's body tissue with at least a portion of said sheath, said variable volume chamber being expandable under the influence of fluid pressure to an extended condition in which said variable volume chamber projects outward from a side surface of said sheath to retard withdrawal of said sheath from the patient's body tissue.

65. An expandable cannula as set forth in claim 57 wherein said cannula has a pointed end portion for piercing the patient's body tissue when said sheath is in the contracted condition and has an oval cross section in a plane extending perpendicular to the longitudinal central axis of said sheath.

66. An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath which at least partially encloses an array of filaments which extends between axially opposite end portions of said sheath, said sheath and said array of filaments being resiliently expandable from a contracted condition in which said sheath and said array of filaments have a relatively small cross sectional size in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which said sheath and

said array of filaments leave a relatively large cross sectional size in a plane perpendicular to the longitudinal central axis of said sheath.

67. An expandable cannula as set forth in claim 66 wherein said sheath and said array of filament have a relatively small oval cross section in a plane extending perpendicular to the longitudinal central axis of said sheath when said sheath is in the contracted condition and a relatively large oval cross section in a plane extending perpendicular to the longitudinal central axis of said sheath when said sheath is in the expanded condition.

68. An expandable cannula as set forth in claim 66 wherein said sheath has a passage which extends between opposite end portions of said sheath, said sheath and said array of filaments being resiliently expandable from a contracted condition in which the passage through the sheath has a relatively small oval cross sectional size in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which the passage through said sheath has a relatively large oval cross sectional size in a plane perpendicular to the longitudinal central axis of said sheath.

69. An expandable cannula as set forth in claim 66 wherein said sheath has a passage which extends between opposite end portions of said sheath, said array of filaments extend along an inner side of said passage, said sheath, passage, and array of filaments being resiliently expandable from a contracted condition in which said sheath, passage, and array of filaments have relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which said sheath, passage, and

array of filaments have relatively large oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath.

66 70. An expandable cannula as set forth in claim 66 wherein said sheath has a passage which extends between opposite end portions of said sheath, said passage in said sheath is engagable by a member having an oval cross sectional configuration in a plane extending perpendicular to a longitudinal central axis of said sheath, said member having an oval cross sectional configuration being axially movable along said passage to expand said sheath and array of filaments from the contracted condition to the expanded condition.

71. An expandable cannula as set forth in claim 66 wherein said sheath has a passage which extends between opposite end portions of said sheath, pump means connected in fluid communication with said passage in said sheath, said pump means being operable to provide fluid pressure which is applied to said passage in said sheath to expand said sheath and array of filaments from the contracted condition to the expanded condition.

72. An expandable cannula as set forth in claim 66 further including a variable volume chamber connected with said sheath and insertable into the patient's body tissue with at least a portion of said sheath, said variable volume chamber being expandable under the influence of fluid pressure to an extended condition in which said variable volume chamber projects outward from a side surface of said sheath to retard withdrawal of said sheath from the patient's body tissue.

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77. An expandable cannula as set forth in claim 73 wherein ^{note} ^{NA} said

passage in said sheath is engagable by a member having an oval cross sectional configuration in a plane extending perpendicular to the longitudinal central axis of said sheath, said member having an oval cross sectional configuration being axially movable along said passage in said sheath to expand said sheath from the contracted condition to the expanded condition.

78. An expandable cannula as set forth in claim 74 further including pump means connected in fluid communication with said passage in said sheath, said pump means being operable to provide fluid pressure which is applied to said passage in said sheath to expand said sheath from the contracted condition to the expanded condition.

79. An expandable cannula as set forth in claim 74 further including a variable volume chamber connected with said sheath and movable into the patient's body tissue with at least a portion of said sheath, said variable volume chamber being expandable under the influence of fluid pressure to an extended condition in which said variable volume chamber projects outward from a side surface of said sheath to retard withdrawal of said sheath from the patient's body tissue.